Williamson County Interjurisdictional CWPP

Annex 6: Georgetown Fire Department

Note: The Georgetown Fire Department continues to work towards a completed CWPP either within this document or as a stand-alone plan. The information provided in this plan is to provide a comprehensive view of the wildfire risk within Williamson County.

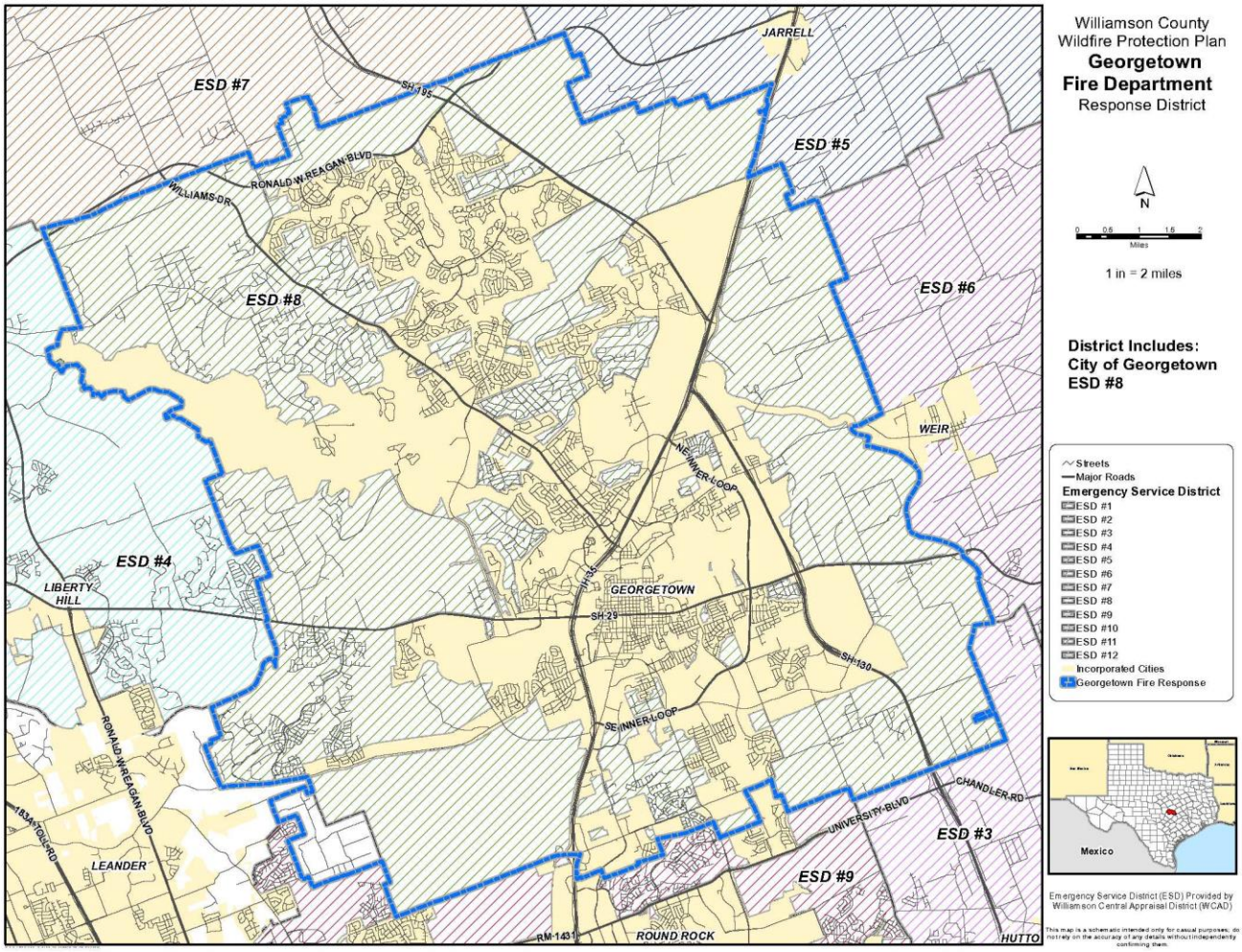
ANNEX 6: GEORGETOWN FIRE DEPARTMENT

INTRODUCTION

Historical Land Use in Georgetown

Per the Georgetown CWPP, historically the land consisting of "black dirt" predominantly to the east of Interstate 35 was used for farming. Commodities included corn, wheat, milo, and cotton. Since top soil is scarce to the west of Interstate 35, the primary land use is ranching, with the predominate species being goats and cattle. In lower laying areas where black dirt was found, settlers did raise corn and cotton. Coastal and other hay- making grasses where produced to supplement ranching needs throughout Williamson County.

Organization and Jurisdiction



Georgetown Fire Department is headed by the fire chief and consists of three branches, four divisions and three sections.

Planning & Support Branch
- Fire Administration Division – responsible for supporting all divisions' daily operations
- Fire & Life Safety Division
- Logistics Section

Operations Branch
- Emergency Operations Division
- Special Operations Section
- Medical Services Section
- Training/Professional Development Division

Emergency Management Branch
- Emergency Management
- Emergency Services

Name:	Georgetown Fire Department	
Address:	3600 D. B. Wood Road	
Department Type:		
Number of Stations:	Station 1 - 301 Industrial Ave – serves Downtown and Southern Georgetown Station 2 - 1603 Williams Drive – serves Central Georgetown Station 3 – 5 Texas Drive – serves Sun City and Northwest Georgetown Station 4 - 4200 Airport Road – serves the Airport and North-Central Georgetown Station 5 and Training Tower & Classroom - 3600 D B Wood Rd – serves Lake Georgetown and Northwest Georgetown	
Municipalities covered:	51 square miles in the City of Georgetown and 86 square miles of ESD #8	
Types of Services Provided:	TRT, Swift Water, Hazmat, Bike Team, Trench/Confined Space	
Firefighting Personnel:		
Full-Time Paid Firefighters	84	
Part-Time Paid Firefighters	0	
Volunteer Firefighters	0	
Non-Firefighting Support Personnel:		
Non-Firefighting Paid Staff	7	
Non-Firefighting Volunteers	0	
Firefighting Equipment:	5 engines (+1 reserve) 1 qunit (+1 reserve) 1 truck 1 rescue 2 brush trucks 1 squad	1 1,800-gallon water tender 1 battalion command unit 1 battalion safety/training unit 1 dive 5 2 swift water boats 1 fire boat
Other Firefighting Resources:	In addition to local fire department capabilities, the Texas Forest Service utilizes dozers to cut fire containment lines. The Dozer Operability Rating (DOR) expresses how difficult it is to	

	operate a dozer in an area based on limitations associated with slope and vegetation/fuel type. Using the fireline production rates published in the NWCG Fireline Handbook 3 (PMS 410-1) as a guide, operability values were assigned to a matrix based on six slope classes and 10 vegetation/fuels classes. Aerial Assistance - Aerial assistance, via air water drops, can be obtained via a request to Star Flight. Each drop is approximately 145 gallons of water.

CURRENT /HISTORICAL MITIGATION ACTIONS AND PROGRAMS

The Georgetown / ESD 8 CWPP lists the following Strategies in their previously developed plan:

- Develop or update an urban forest master plan
- Identify critical forest areas and consider preservation options
- Review and strengthen tree ordinances Promote public education and awareness
- Assess species suitability with regards to xeriscaping Plant trees

PUBLIC EDUCATION AND OUTREACH PROGRAMS

Georgetown Fire Prevention offers classes to the public in all areas of fire safety. Programs include lectures, audiovisual presentations and hands-on experience. Examples of classes include fire extinguisher training and the National Fire Protection Association's (NFPA) Remembering When program for the aging.

The Georgetown Fire Department maintains Facebook pages to use as an effective tool to communicate with residents. The Department uses their Facebook page to post updates on fires, accidents, and rescue incidents; share public service announcements; and inform people of upcoming events. Additionally, the Georgetown Fire Department maintains a website (https://fire.georgetown.org/) that provides information about the Department, services they provide, and public education information (https://fire.georgetown.org/public-education-station-tours/).

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2 (City) / 8B (ESD)	December 31, 2007
Storm Ready certification	Yes	Williamson County	
Firewise Communities classification	Yes	Sun City Texas Community Association	December 14, 2009
Natural Disaster/Safety Programs in/for Schools			
Public Education Program/Outreach (through website, social media)	Yes	See above	

CAPABILITIES ASSESSMENT

Emergency Response Capabilities

Wildfires – the Department maintains a fleet of three brush fire vehicles and department personnel are equipped to combat wildfires

Some Georgetown Fire Department participated in a state-wide response program (TIFMAS) which addresses large scale structural and wildland fire situations

Policies

No information received.

Regulations

No information received.

Ordinances and Codes

Adopted the 2012 International Fire Code; Chapter 8.04 – Fire Prevention Code of the City's Code of Ordinances

Plans, Reports and Studies

Georgetown / ESD 8 Community Wildfire Protection Plan

Georgetown Fire Department – Fire Department Program and Service Audit and Master Plan, July 2013

Resources

No information received.

IDENTIFY CRITICAL INFRASTRUCTURE AND COMMUNITY VALUES AT RISK

Critical Infrastructure within the Georgetown Fire Department

One of the critical elements of the Community Wildfire Protection Plan is to analyze where the critical infrastructure within the district is located in comparison to the highest risk areas for wildfire. Critical facilities typically fall within the following categories: Hospitals, Schools, Law Enforcement, Fire, EMS and Tier II facilities. Within the Georgetown Fire Department. The following summarizes the general types of critical facilities located within the District.

Georgetown Fire Department Critical Infrastructure Summary	
Facility Type	Number of Facilities
Hospitals	1
Schools	32
Law Enforcement	4
Fire	5
Emergency Medical Services (EMS)	1
Tier II Facilities	52

As mentioned above, once the critical facilities are identified, the next step is to assess where and which facilities may be located in high risk areas and to then determine whether these facilities are candidates for special actions / measures like hardening, increased fire proofing, wildfire mitigation or relocation, etc. This plan analyzed impacts based in five wildfire factors: Wildland Urban Interface, Flame Length, Surface Fuels, Vegetation and Wildfire

Threat as mapped and defined by the Texas State Forest Service and Texas A&M. More detail is provided later in this annex as to the level and possible impacts of these five characteristics.

The following information is taken from the Georgetown / ESD 8 CWPP:

Electric System for the City of Georgetown

The City of Georgetown owns and operates its own electrical system. The service territory covers 42 square miles, and more than 202 miles of overhead construction, and 166 miles of primary underground electric lines with seven substations.

The substations are located at the following:

Georgetown – 918 W. University Ave. Chief Brady – 5290 IH-35
Georgetown East – 2911 SE Inner Loop Rivery – 401 Wolf Ranch Pkwy. Georgetown South – 950 Rabbit Hill

Pedernales Electric Cooperative (PEC) supplies power to the western and northern fire district. PEC has a two sub-station in the Georgetown Fire Response District and it is located at the following:

Classcock- 3540 Hwy. 195 Gabriel - 200 County Rd 151

Water/Waste Water System for the City of Georgetown

The City operates four water treatment plants and five wastewater treatment plants. The City of Georgetown water services area includes the City and portions of its Extra Territorial Jurisdiction (ETJ), which encompass approximately 71 square miles of privately owned land and portions of major watersheds that include the San Gabriel River, Berry Creek, Pecan Branch, Smith Branch, and Mankin's Branch. The current service area population is estimated at 60,596. The City is currently supplied via two ground water treatment plants and a surface water treatment plant.

Water Treatment Plants
Lake Water Plant- 3601 DB Wood Rd. Southside Plant – 2706 S. Austin Ave.
San Gabriel Park Plant – 1107N. Berry Creek Plant – 30000 Briar Crest College

Waste Water Treatment Plants
San Gabriel Plant – 1107N. College Cimarron Hills Plant – Birdstone Lane

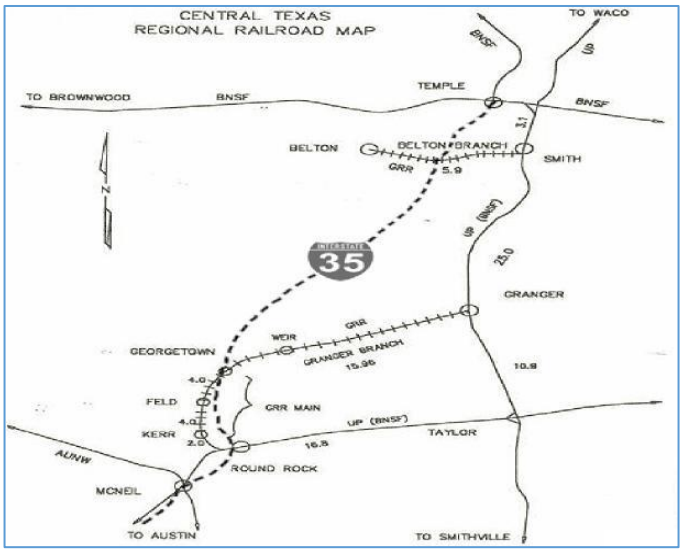
Dove Springs Plant – 400 Rock Drove

Pecan Branch Plant – 3502 FM 971

Berry Creek Plant – 30002 Briar Creek

Georgetown Railroad Company

The Georgetown Railroad Company (GRR) owns and operates a small section of tracks which runs through the City of Georgetown. GRR operates two non-connected lines: The "Granger Branch" a 24.3 mile line from an interchange with Union Pacific at Kerr Texas through Georgetown to an interchange with Union Pacific at Granger, Texas (the line was previously owned by Missouri Pacific and Missouri-Kansas-Texas). The "Belton Branch", a 5.9 mile line from Belton, Texas to an interchange with Union Pacific at Smith, Texas (the line was previously owned by Missouri-Kansas-Texas). Although its payloads include ammonium nitrate, lumber, and grain, the major industry on the Georgetown Railroad is the large quarry of the Texas Crushed Stone Company, located west of Georgetown. Although these tracks no longer serve as a primary means of transport through the community. Cars are stored on the tracks and moved from various locations on the tracks. The Georgetown Railroad Company is located at 5300 South Interstate 35.



Wildland Urban Interface Fire Hazard and Environment

As mentioned previously in the Williamson County Community Wildfire Protection Plan (CWPP) on the national level, following the establishment of the National Fire Plan via Executive Order due to the 2000 national wildfire season, work throughout the country was undertaken to identify areas at high risk from wildfire; this work would be used to identify the location of hazardous fuel reduction projects designed to reduce this risk. Communities across the nation that are considered to have a WUI have been identified; this list was subsequently published in the Federal Register.

Loss of structures due to wildland fires has been attributed to many factors, one of which is the proximity of hazardous fuels to homes and communities. During periods of hot, dry weather, the buildup of vegetation that has occurred on some Federal, State, and private lands in the vicinity of communities poses a potentially high risk of damage to homes and other structures, disruption to the local economy, or loss of life.

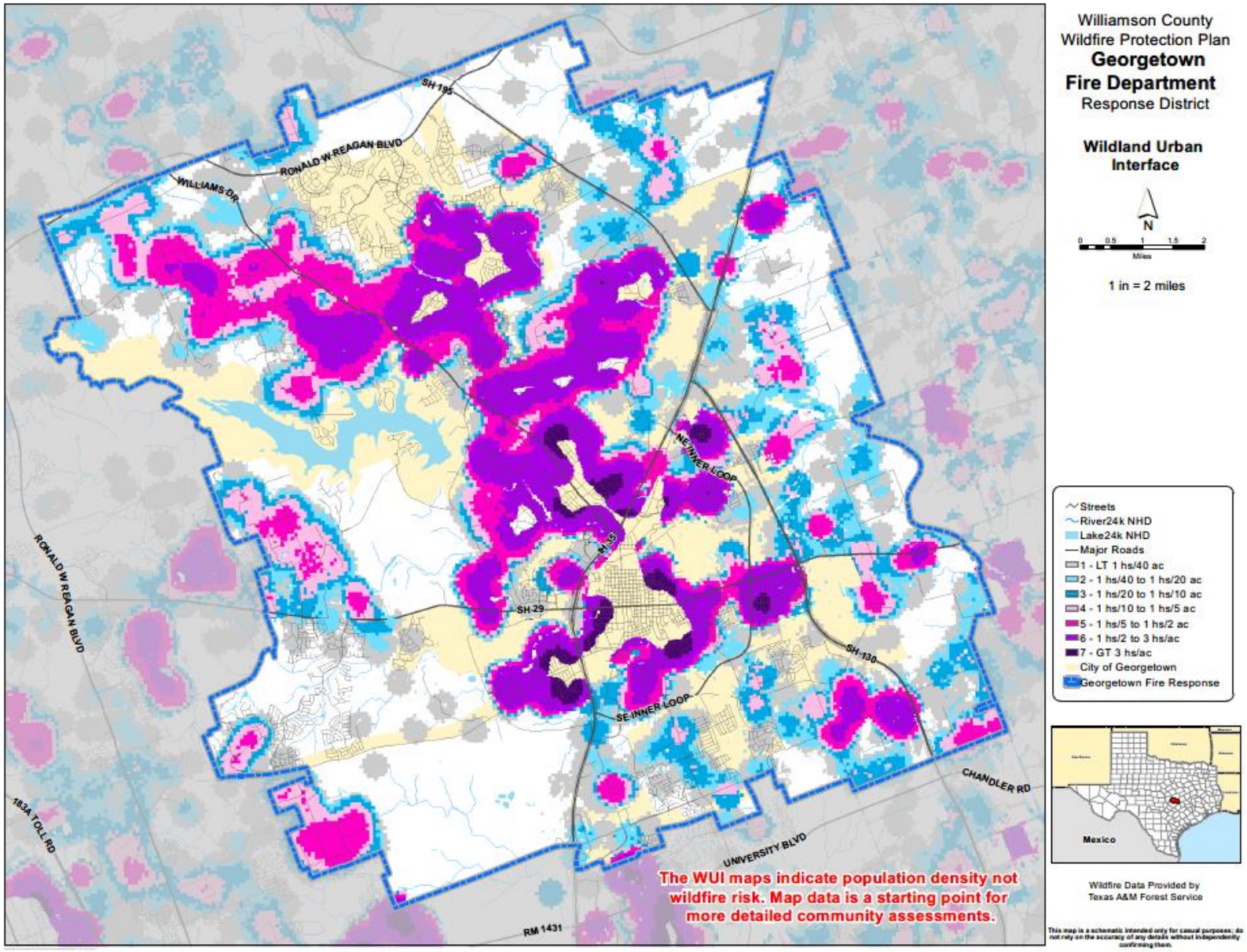
Other factors—including weather conditions and patterns, and the hazardous fuels conditions in the immediate vicinity of homes, businesses, and other structures—play important roles in the spread of wildland fire. Reducing hazardous fuel near communities may reduce, but not eliminate, wildlife risks to these communities. Some risk is

inherent to communities that exist in fire-dependent ecosystems. Private landowners may help reduce this risk by creating defensible space around their homes and businesses, and by using fire-resistant materials in building those structures. Without such precautionary measures, fuel reduction on Federal land in the vicinity may be ineffective in significantly reducing community risk.

Per the Texas A&M Forest Service "The WUI is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases the risk from wildfire. In Texas nearly 85% of wildfires occur within two miles of a community." Texas is one of the fastest growing states in the Nation, with much of this growth occurring adjacent to metropolitan areas. This increase in population across the state will impact counties and communities that are located within the Wildland Urban Interface (WUI).

For the Georgetown FD project area, it is estimated that 50,615 people or 78% of the total project area population (64,617) live within the WUI. The Texas A&M Forest Service WUI dataset is derived using advanced modeling techniques based on the Where People Live dataset and LandScan USA population count data available from the Department of Homeland Security, HSIP Freedom Data Set. WUI is simply a subset of the Where People Live dataset. The primary difference is populated areas surrounded by sufficient non-burnable areas (i.e. interior urban areas) are removed from the Where People Live data set, as these areas are not expected to be directly impacted by a wildfire.

Figure 1. Wildland Urban Interface



	Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
	LT 1hs/40ac	343	0.7 %	12,966	25.2 %
	1hs/40ac to 1hs/20ac	462	0.9 %	6,675	12.9 %
	1hs/20ac to 1hs/10ac	1,033	2.0 %	6,870	13.3 %
	1hs/10ac to 1hs/5ac	1,987	3.9 %	6,591	12.8 %
	1hs/5ac to 1hs/2ac	5,132	10.1 %	7,736	15.0 %
	1hs/2ac to 3hs/1ac	30,648	60.6 %	9,897	19.2 %
	GT 3hs/1ac	11,010	21.8 %	813	1.6 %
	Total:	**50,615**	**100.0 %**	**51,548**	**100.0 %**

Surface Fuels

DEFINITIONS

Surface fuels—Surface fuels, or fire behavior fuel models as they are technically referred to, contain the parameters needed by the Rothermel (1972) surface fire spread model to compute surface fire behavior characteristics, such as rate of spread, flame length, fireline intensity, and other fire behavior metrics.

Surface fuels are important to categorize for they account for the surface fire potential. Canopy fire potential is computed through a separate but linked process. The Texas Wildfire Risk Assessment (TWRA) Summary Report for Williamson County accounts for both surface and canopy fire potential in the fire behavior outputs.

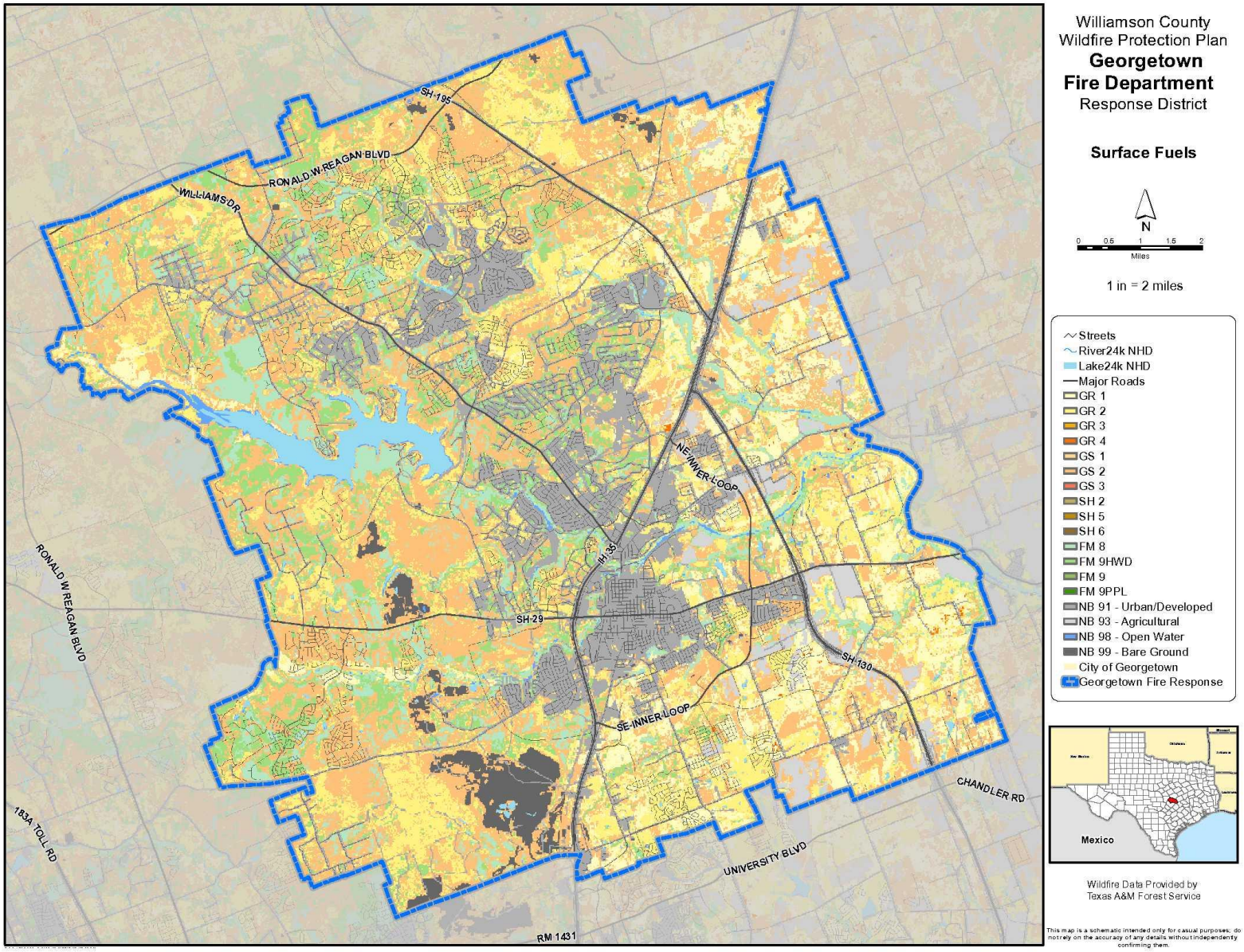
Surface fuels are typically categorized into one of four primary fuel types based on the primary carrier of the surface fire:

Grass
Shrub/brush
Timber litter
Slash

There are two standard fire behavior fuel model sets published for use. The Fire Behavior Prediction System 1982 Fuel Model Set (Anderson 1982) contains 13 fuel models and the Fire Behavior Prediction System 2005 Fuel Model Set (Scott and Burgan 2005) contains 40 fuel models. The TWRA uses fuel models from both sets, as well as two additional custom fuel models devised by Texas A&M Forest Service.

Figure 2 and its associated table shows that the county primarily consists of Moderate Load (32.3%), Urban/Developed at 17.8%, followed by Low Load, Dry Climate Grass at 16.4%, Short, Sparse Dry Climate Grass (Dynamic) at 10.3%, and Closed Timber Litter with 7.6%. Figure 32 is a Georgetown map showing all the surface fuel types.

Figure 2. Georgetown- Surface Fuels by type

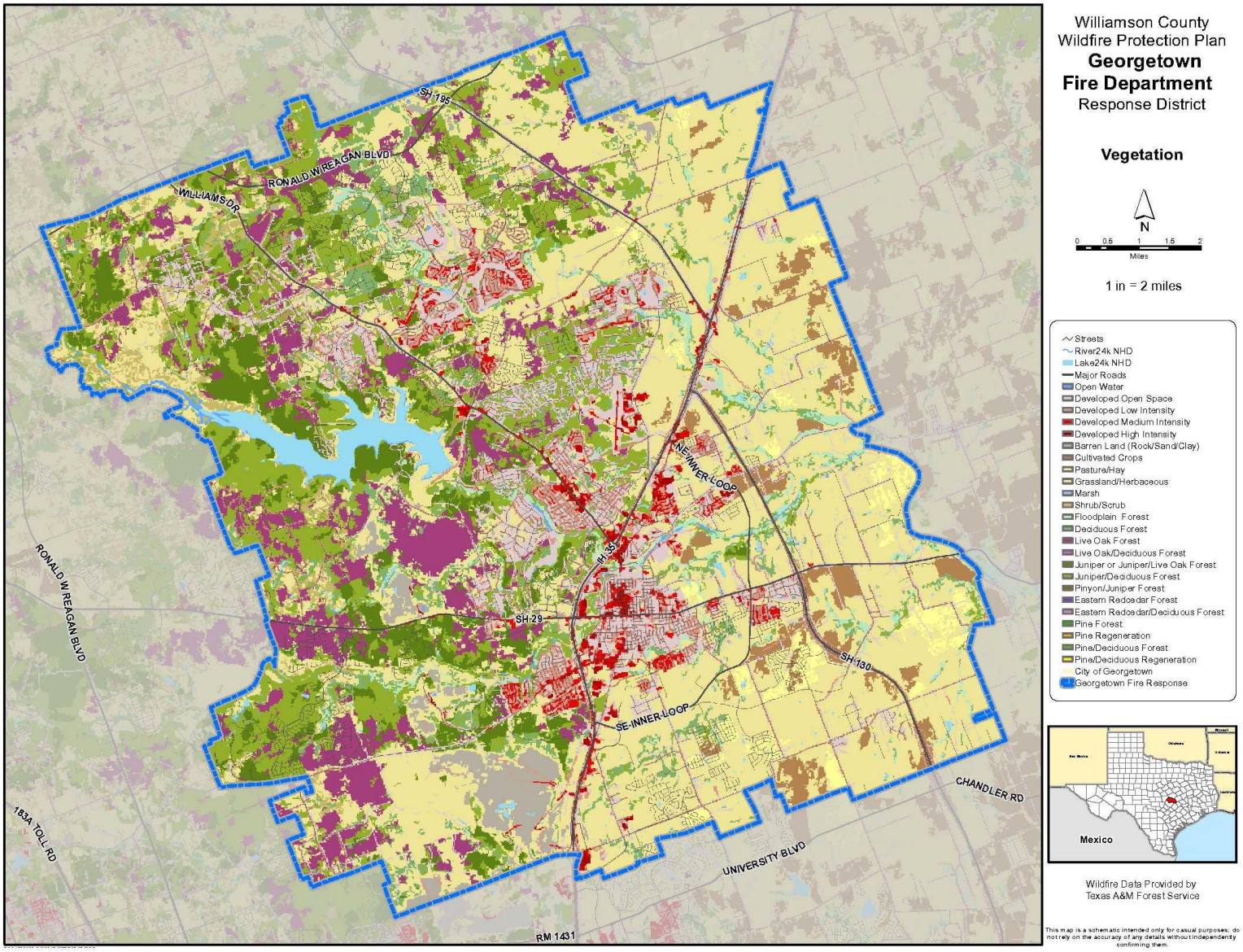


	Surface Fuels	Description	FBPS Fuel Model Set	Acres	Percent
	GR 1	Short, Sparse Dry Climate Grass (Dynamic)	2005	9,146	10.3 %
	GR 2	Low Load, Dry Climate Grass (Dynamic)	2005	14,538	16.4 %
	GR 4	Moderate Load, Dry Climate Grass (Dynamic)	2005	58	0.1 %
	GS 2	Moderate Load, Dry Climate Grass-Shrub (Dynamic)	2005	28,591	32.3 %
	FM 8	Closed timber litter (compact)	1982	6,696	7.6 %
	FM 9 HWD	Hardwood litter (fluffy) - Low Load for Texas	Custom	8,302	9.4 %
	NB 91	Urban/Developed	2005	15,703	17.8 %
	NB 93	Agricultural	2005	2,028	2.3 %
	NB 98	Open Water	2005	1,651	1.9 %
	NB 99	Bare Ground	2005	1,740	2.0 %
			Total:	**88,452**	**100.0%**

Vegetation

The Vegetation map describes the land cover and vegetation types across the Georgetown area. In the Texas Wildfire Risk Assessment (TWRA), the Vegetation dataset is used to support the development of the Surface Fuels, Canopy Cover, Canopy Stand Height, Canopy Base Height, and Canopy Bulk Density datasets. The vegetation classes with descriptions are shown in the following table. It should be noted that the area is dominated by Grassland/Herbaceous vegetation that can be grazed (39.1%), Juniper/Deciduous Forest (12.9%), Developed Open Space (9.0%) and Live Oak Forest (7.6%).

Figure 3. Georgetown Vegetation



Vegetation

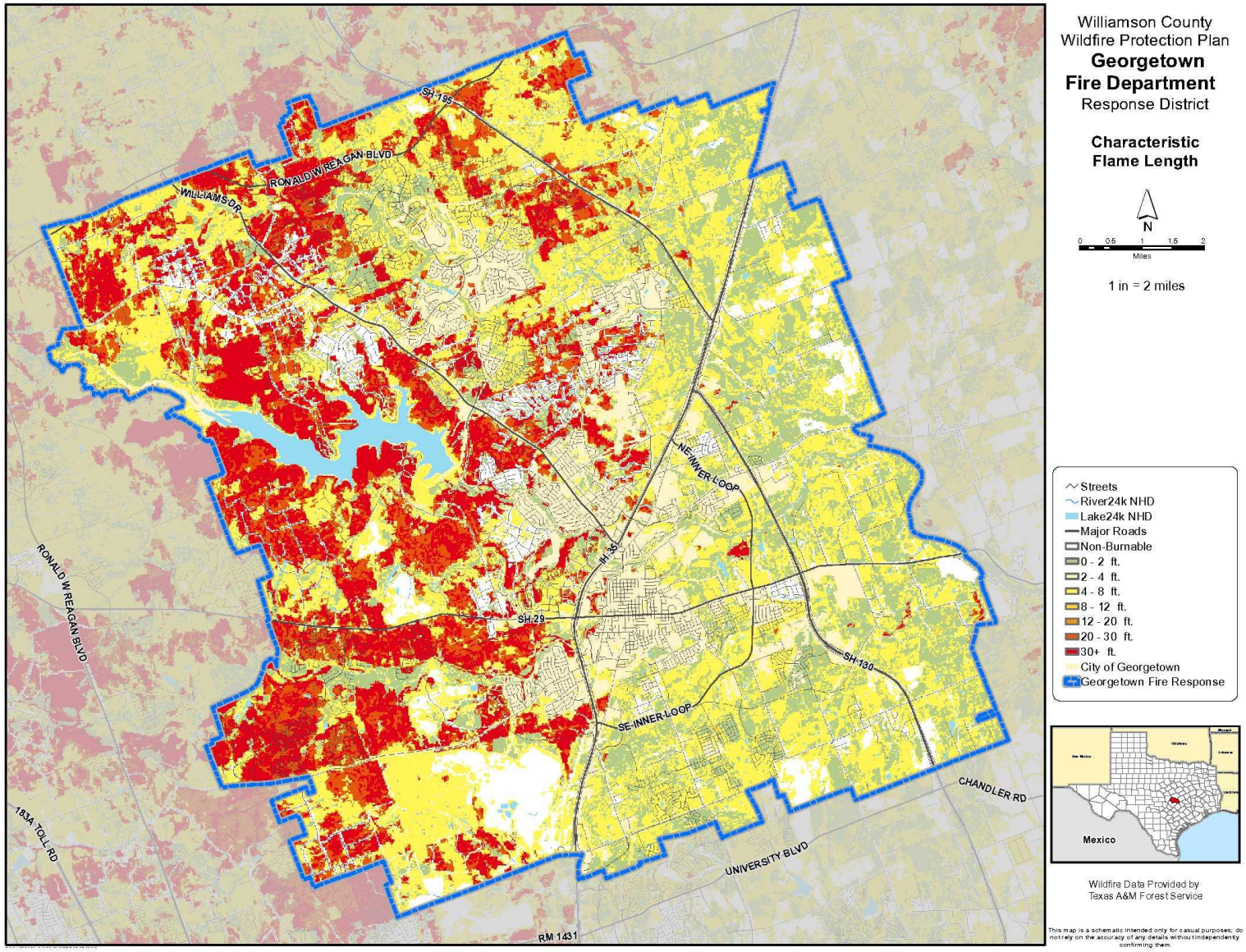
Class	Description	Acres	Percent
Open Water	All areas of open water, generally with < 25% cover of vegetation or soil	1,423	1.6 %
Developed Open Space	Impervious surfaces account for < 20% of total cover (i.e. golf courses, parks, etc…)	7,923	9.0 %
Developed Low Intensity	Impervious surfaces account for 20-49% of total cover	5,925	6.7 %
Developed Medium Intensity	Impervious surfaces account for 50-79% of total cover	1,401	1.6 %
Developed High Intensity	Impervious surfaces account for 80-100%of total cover	474	0.5 %
Barren Land (Rock/Sand/Clay)	Vegetation generally accounts for <15% of total cover	1,696	1.9 %
Cultivated Crops	Areas used for the production of annual crops, includes land being actively tilled	2,044	2.3 %
Pasture/Hay	Areas of grasses and/or legumes planted for livestock grazing or hay production	1,207	1.4 %
Grassland/Herbaceous	Areas dominated (> 80%) by grammanoid or herbaceous vegetation, can be grazed	34,599	39.1 %
Shrub/Scrub	Areas dominated by shrubs/trees < 5 meters tall, shrub canopy > than 20% of total vegetation	1,880	2.1 %
Floodplain Forest	> 20% tree cover, the soil is periodically covered or saturated with water	1,146	1.3 %
Deciduous Forest	> 20% tree cover, >75% of tree species shed leaves in response to seasonal change	5,278	6.0 %
Live Oak Forest	> 20% tree cover, live oak species represent >75% of the total tree cover	6,734	7.6 %
Juniper or Juniper/Live Oak Forest	> 20% tree cover, juniper or juniper/live oak species represent > 75% of the total tree cover	5,353	6.1 %
Juniper/Deciduous Forest	> 20% tree cover, neither juniper or deciduous species represent > 75% of the total tree cover	11,367	12.9 %
	Total:	**88,452**	**100.0 %**

Flame Length

Characteristic Flame Length is the typical or representative flame length of a potential fire based on a weighted average of four percentile weather categories. Flame Length is defined as the distance between the flame tip and the midpoint of the flame depth at the base of the flame, which is generally the ground surface. It is an indicator of fire intensity and is often used to estimate how much heat the fire is generating. Flame length is typically measured in feet. Flame length is the measure of fire intensity used to generate the response index outputs for the TWRA. Flame length characteristics are varied in the Georgetown area but is dominated by 31.9% of the area having a projected flame length of 4-8 feet, non-burnable area is projected at 23.9%, followed by 0-2 feet at 18.6%, and 2-4 feet flame lengths are estimated at only 2% of the total area.

Flame length is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for each weather influence zone in Texas. A weather influence zone is an area where, for analysis purposes, the weather on any given day is considered uniform. There are 22 weather influence zones in the State of Texas.

Figure 4. Georgetown Flame Length



Flame Length

	Flame Length	Acres	Percent
	Non-Burnable	21,121	23.9 %
	0 - 2 ft	16,452	18.6 %
	2 - 4 ft	1,799	2.0 %
	4 - 8 ft	28,213	31.9 %
	8 - 12 ft	58	0.1 %
	12 - 20 ft	12	0.0 %
	20 - 30 ft	8,793	9.9 %
	30 + ft	12,004	13.6 %
	Total:	**88,452**	**100.0 %**

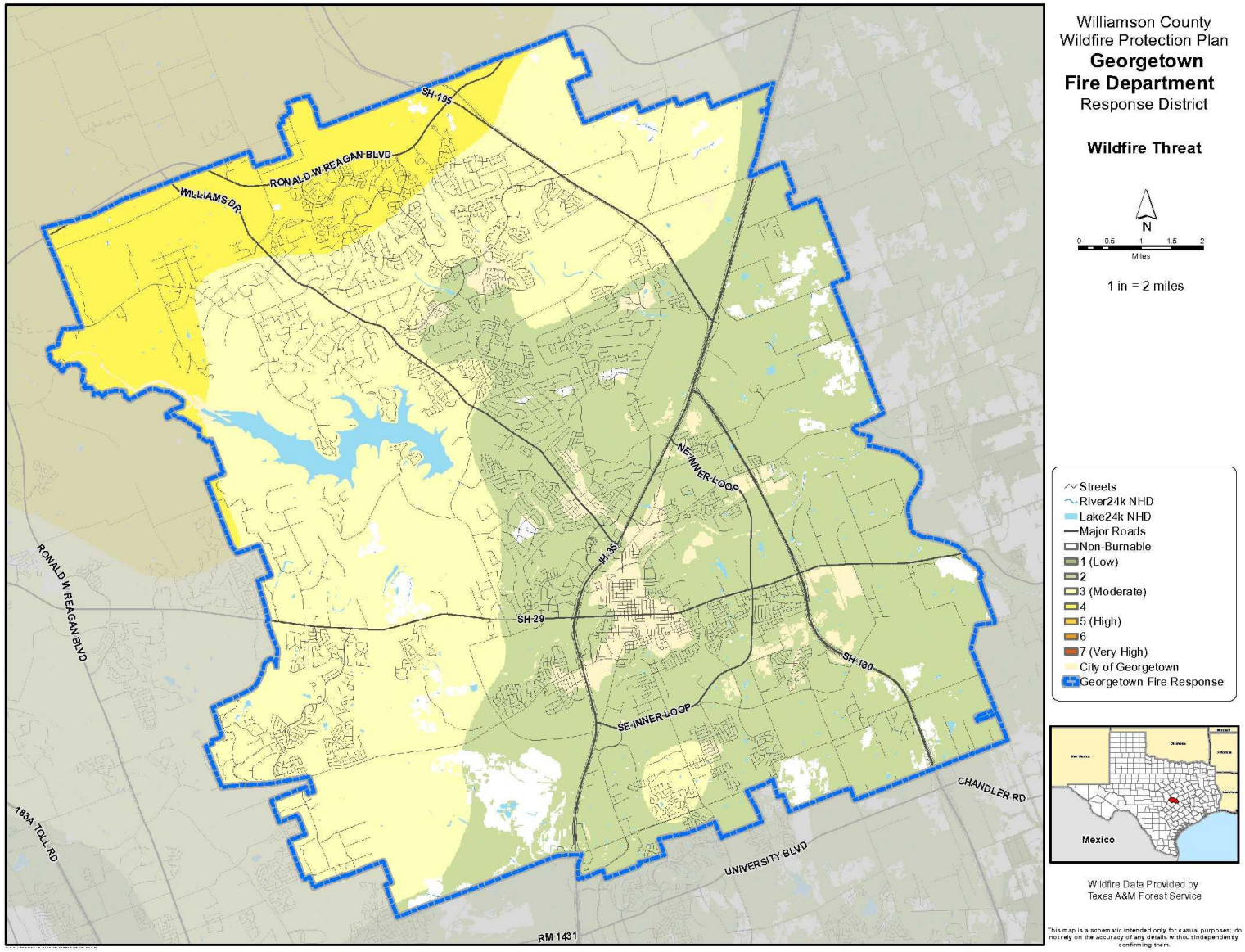
Wildfire Threat

Per the Texas A&M Forest Service Wildfire Threat is the likelihood of a wildfire occurring or burning into an area. Threat is derived by combining a number of landscape characteristics including surface fuels and canopy fuels, resultant fire behavior, historical fire occurrence, percentile weather derived from historical weather observations, and terrain conditions. These inputs are combined using analysis techniques based on established fire science.

The measure of wildfire threat used in the Texas Wildfire Risk Assessment (TWRA) is called Wildland Fire Susceptibility Index, or WFSI. WFSI combines the probability of an acre igniting (Wildfire Ignition Density) and the expected final fire size based on rate of spread in four weather percentile categories. WFSI is defined as the likelihood of an acre burning. Since all areas in Texas have WFSI calculated consistently, it allows for comparison and ordination of areas across the entire state. For example, a high threat area in East Texas is equivalent to a high threat area in West Texas.

To aid in the use of Wildfire Threat for planning activities, the output values are categorized into seven (7) classes. These are given general descriptions from Low to Very High threat. Only 8.7% of the area within the Georgetown Fire Department area is designated as non-burnable. The balance of the area or 42.6 % is designated as low (categories 1), and 48.7% as moderate (categories 3 and 4).

Figure 5. Georgetown Wildfire Threat

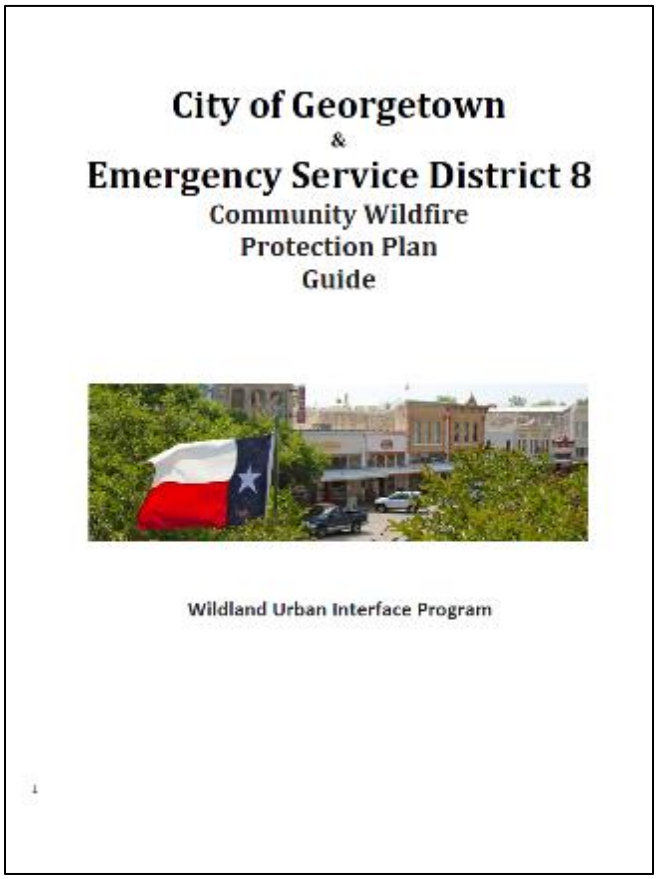


Wildfire Threat

	Class	Acres	Percent
	Non-Burnable	7,712	8.7 %
	2	37,691	42.6 %
	3 (Moderate)	32,880	37.2 %
	4	10,170	11.5 %
	Total:	**88,452**	**100.0 %**

CITY OF GEORGEWTOWN AND EMERGENCY SERVICE DISTRICT 8 COMMUNITY WILDFIRE PROTECTION PLAN

The City of Georgetown/ Emergency Service District 8 drafted and adopted a freestanding Community Wildfire Protection Plan in 2015. Here is a link to the complete plan:



WILDFIRE MITIGATION ACTIONS

The City of Georgetown and ESD 8 developed mitigations as part of their earlier efforts to develop a free-standing Community Wildfire Protection Plan. Those mitigation actions have been transferred into the Williamson County CWPP Mitigation Action Worksheet format and included on the following pages.

Mitigation Action Worksheet

Please complete one worksheet per action with as much detail as possible, using the instructions beginning on page 3.

Name of Jurisdiction: City of Georgetown / ESD #8 **Mitigation Action #:** 1

Mitigation Action Title: Public Education

Assessing the Risk	
Hazard(s) addressed: (check all that apply)	☒ Wildfire ☒ All Hazards ☒ Drought ☒Extreme Heat ☒Flood ☒Lightning ☒Thunderstorm ☒Tornado ☒Wind ☒Winter Weather
Specific problem being Mitigated (describe why action is needed)	Education of the public and more specifically the homeowner is one of the best tools in protecting the community in wild fire protection.
Evaluation of Potential Alternatives	
Alternatives Considered (name of project and reason for not selecting)	1. Utilize social media outlets to publish public education and information to Community residents. 2. Hold open house or provide education and information during scheduled events. 3. Take no action.
Action/Project Intended for Implementation	
Describe how action will be implemented (main steps involved)	The homeowner in the WUI needs to be educated on a wide range of information from why the area is at risk to wildfire to preparedness and evacuation measures. Once this process takes place, the homeowner can actively participate fuel reduction measures to reduce the risk of loss during a major wildland fire.
Action/Project Type	☐Local Plans and Regulations ☐Structure and Infrastructure Project ☐Natural Systems Protection ☒Education and Awareness Programs
Applicable Goals/Objectives (refer to list of goals/objectives)	☒Goal #1 ☒Goal #2 ☒Goal #3 ☒Goal #4 Objective: 1,2,3,4,5
Applies to existing or future development	☐ Existing Development ☐Future Development ☒ Both Existing and Future Development ☐Not Applicable
Describe benefits (losses avoided)	☒Life Safety ☒Damage Reduction ☐Other Describe: Comprehensive education will result in enhanced life safety and property protection.
Estimated Cost	☒ < $10,000; ☐$10,000 to $100,000; ☐>$100,000 Other Amount: $
Plan for Implementation	
Responsible Department	City of Georgetown and ESD #8 EM
Local Planning Mechanism (check all that apply)	☐Capital Improvement Plan ☒Comprehensive Plan ☐Building Code ☐Ordinance ☐Other
Potential Funding Sources	City and ESD 8 General Budget, free sources of information literature, FEMA mitigation, or private/non-profits organizations.
Timeline for Completion	☐ Short Term (1-5 yrs.) ☐ Long Term (>5 yrs.) ☒ Ongoing
Reporting on Progress	
Status/Comment	☐Not Started ☒In-progress ☐Delayed ☐Completed ☐No Longer Required Comment: Routine preparedness and education information is shared through social media sites and during live demos or appearances.
Completed by: (name, title, phone #)	

Prioritization Worksheet

Mitigation Action #: 1

Mitigation Action Title: Public Education

Criteria	Numeric Rank: Definitely Yes = 4, Maybe Yes = 3, Unknown/Neutral = 2, Probably No = 1, Definitely No = 0		Provide brief rationale for numeric rank when appropriate
1. Will the action result in Life Safety?			Education will focus on personal/family safety.
2. Will the action result in Property Protection?			Education will focus on personal property hazard mitigation.
3. Will the action be Cost-Effective? (future benefits exceed cost)			Education is one of the most cost effective ways to reduce loss of life and property damage.
4. Is the action Technically feasible			Education can be as high or low tech as warranted.
5. Is the action Politically acceptable?			Public education programs are always supported.
6. Does the jurisdiction have the Legal authority to implement?			Williamson County has the legal authority to provide public education programs to it's residents.
7. Is funding available for the action?			Minimal funding is available, look to free or inexpensive ways to provide education.
8. Will the action have a positive impact on the natural Environment?			Public education programs can be delivered with a focus on limiting environmental impacts.
9. Is the action Socially acceptable?			No known issues with providing this type of education.
10. Does the jurisdiction have the Administrative capability to execute the action?			OEM currently provides public safety related training and can incorporate more public education within the current programs.
11. Will the action reduce risk to more than one hazard (Multi-Hazard)?			Education and training will be focused on All-Hazards, season specific when applicable.
12. Can the action be implemented Quickly?			Education and Training can begin quickly through electronic means with more effort needed to begin Live program delivery.
13. Is there an Agency/Department Champion for the action?			Williamson County OEM and other Emergency Services Departments are committed to the educational needs of the County.
14. Will the action meet other Community Objectives?			Education and training will likely be the most effective program to meet Community Objectives.
Total			
Priority: Low = <35, Medium = 35-49, High = >50	☐ Low ☐ Medium ☐ High		

Mitigation Action Worksheet Instructions

This instruction sheet provides additional guidance on how to complete the Mitigation Action Worksheet and Prioritization Worksheet. If you have any questions, please contact: Laura Johnston at laura.johnston@tetratech.com.

General

Name of Jurisdiction: (ex. Xxxx County or City of xxxxx)

Mitigation Action #: For new actions, enter the next sequential number following the last action number from the previous plan. For continuing actions, enter the action number used in the previous plan. There should be a unique number for each action for your jurisdiction.

Mitigation Action Title: This should be a sort title that quickly identifies the nature of the action (i.e. acquisition of flood prone properties on Main Street or Community Safe Room construction, etc.).

Assessing the Risk

Hazard(s) addressed: Please check ALL hazards that apply. For example, a generator can mitigate damage from any hazard that could result in power outage.

Specific problem being mitigated: Please describe the specific problem being mitigated. For example, a flood prone property acquisition can mitigate the problem of repetitive flooding due to the xxx River overtopping its banks.

Evaluation of Potential Alternatives

Alternatives Considered: Please consider different options to mitigate the problem identified. One alternative can be to accept the current level or risk (tolerate the vulnerability/problem) by deciding to take no action at this time. If you choose to take no action, please complete the worksheet up to and including this section and this will be noted in the Plan.

Please include the name of the action considered and a brief reason as to why the action was not selected. The reasoning documents the consideration of these alternatives. For example, alternatives to flood prone property acquisition could be elevation of structures or flood proofing measures. Alternatives can be a variation of the selected action. For example, alternatives for a generator action, could include alternative fuel types or switching mechanisms.

Action/Project Intended for Implementation

Describe how action will be implemented: Please provide a brief description of the steps involved to implement the selected action.

Action/Project Type: Select which of the following types your action can be classified under.

Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.

Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

3

Mitigation Action Worksheet Instructions

Education and Awareness Programs (EAP) These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

Goals/Objectives: Please select the appropriate Goal # that the action falls under and enter the applicable Objective number. The Goals and Objectives can be found in your meeting hand out.

Benefits: Please indicate whether the action will provide life safety and/or damage reduction, or another type of benefit. Please also describe the losses that will be avoided if the project is implemented. Avoided losses can include avoided injuries/loss of life, avoided physical property damage, avoided loss of use, avoided economic losses, etc.

Estimated Cost: Please provide the estimated cost or use the following ranges:
Low = < $10,000 Medium = $10,000 to $100,000 High = > $100,000

Plan for Implementation

Responsible Department: Please enter the department within your jurisdiction that will provide status updates and be responsible for implementation of this action.

Local Planning Mechanism: Please check all that apply. If the planning mechanism through which the action can be implemented is not listed, please select "other" and enter it.

Potential Funding Sources: Please identify the anticipated funding source such as specific grant programs and/or local funds. Several grant programs that can fund mitigation actions are listed below:

FEMA	Hazard Mitigation Grant Program
	Flood Mitigation Assistance Program
	Pre-disaster Mitigation Program
U.S. Housing and Urban Development	Community Development Block Grants (Disaster and Non-disaster)
U.S. Department of Agriculture	Rural Development Grants
	Emergency Watershed Protection Program
U.S. Army Corps of Engineers	Studies and Projects
Texas General Land Management Office	Coastal Mitigation
State Forestry Department	
State Department of Transportation	

Timeline for Completion: Please select from the following: Short Term = 1 to 5 years. Long Term= greater than 5 years Ongoing = Ongoing program.

Reporting on Progress

Status/Comment: Please select the appropriate status and enter any comments.

Completed by: Please enter the name of the person that completed the worksheet along with their title and phone number.

Date: Enter the date the Mitigation Action Worksheet was completed.